INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/15717

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G06F 9/46
US CL :709/318

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/318, 108

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,499,364 A (KLEIN et al) 12 March 1996, col. 4, line 36 - col. 19, line 35.	1, 23, 37, 47, 57, 63
A	US 6,147,601 A (SANDELMAN et al) 14 November 2000, col. 3, line 40 - col. 8, line 49.	1-22, 24-36, 38-46, 48-56, 58-62, 64-67
A	US 5,696,486 A (POLIQUIN et al) 09 December 1997, col. 5, line 32 - col. 16, line 27.	1-22, 24-36, 38-46, 48-56, 58-62, 64-67
A	US 6,021,262 A (COTE et al) 01 February 2000, col. 3, line 66 - col. 9, line 13.	1-22, 24-36, 38-46, 48-56, 58-62, 64-67

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search	Date of mailing of the international search report
05 AUGUST 2003	26 AUG 2003
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer J. FOLLANSBEE for James R. Matthews Telephone No. (703) 305 9657

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